CLAIMS

1. A method for selecting a core network for a communication device comprising the steps of:

receiving at least one core network identifier;

selecting a core network identifier to form a selected core network identifier;

setting an indicator to indicate whether a substitute core network is allowed;

determining whether the selected core network identifier corresponds to a shared network;

forming a registration request message containing the selected core network identifier;

including the indicator in the registration request message, if the selected core network identifier corresponds to a shared network; and

transmitting the registration request message.

2. A method according to claim 1 wherein the at least one core network identifier is at least one public land mobile network identifier (PLMNid).

3. A method according to claim 1 wherein the step of selecting includes the communication device automatically choosing the selected core network identifier according to the following priority levels:

(1) registered core network,

(2) home core network,

(3) user-controlled list of core networks (in priority order),

(4) operator-controlled list of core networks (in priority order),

(5) core networks with sufficient received signal quality in random order, and

(6) other core networks in order of received signal quality.

4. A method according to claim 3 wherein the step of setting indicates that a substitute core network is allowed when the selected core network identifier is selected at priority level (5).

5. A method according to claim 3 wherein the step of setting indicates that a substitute core network is allowed when the selected core network identifier is selected at priority level (6).

6. A method according to claim 1 wherein the step of selecting includes the communication device presenting the at least one core network identifier to a user according to the following priority levels:

(1) registered core network,

(2) home core network,

(3) user-controlled list of core networks (in priority order),

(4) operator-controlled list of core networks (in priority order),

(5) core networks with sufficient received signal quality in random order, and

(6) other core networks in order of received signal quality.

7. A method according to claim 6 wherein the step of selecting further includes:

receiving a selected core network identifier from the user.

8. A method according to claim 6 wherein the step of setting comprises:

setting the indicator to indicate that a substitute core network is disallowed.

9. A method according to claim 1 wherein the step of setting comprises:

setting the indicator to indicate that a substitute core network is disallowed.

10. A method for selecting a core network for a communication device comprising the steps of:

receiving a registration request message;

extracting a selected core network identifier from the registration request message; and

determining if the registration request message includes an indicator indicating whether a substitute core network is allowed.

11. A method according to claim 10 further comprising the steps of:

determining a substitute core network, if the indicator indicates that a substitute core network is allowed; and

forwarding the registration request message to the substitute core network.

12. A method according to claim 10 wherein the substitute core network shares radio access resources with a core network indicated by the selected core network identifier.

13. A method according to claim 10 wherein the substitute core network is a core network indicated by the selected core network identifier.

14. A method according to claim 10 wherein the substitute core network is not a core network indicated by the selected core network identifier.

15. A method according to claim 10 further comprising the step of:

forwarding the registration request message to a core network identified by the selected core network identifier, if the indicator indicates that a substitute core network is not allowed.

16. A method according to claim 10 further comprising the step of:

forwarding the registration request message to a core network identified by the selected core network identifier, if the registration request message does not include an indicator.

17. A method for selecting a public land mobile network (PLMN) for user equipment (UE) comprising the steps of:

receiving at least one PLMN identifier (PLMNid);

selecting a PLMNid to form a selected PLMNid;

setting an indicator to indicate whether a substitute PLMN is allowed;

determining whether the selected PLMNid corresponds to a shared radio access network (RAN);

forming a registration request message with the selected PLMNid;

including the indicator in the registration request message, if the selected PLMNid corresponds to a shared RAN; and

transmitting the registration request message from the UE.

18. The method according to claim 17 wherein the step of setting comprises:

setting the indicator to indicate that a substitute PLMN is disallowed when the UE is in manual network selection mode.

19. The method according to claim 17 wherein the step of setting comprises:

setting the indicator to indicate that a substitute PLMN is disallowed when the UE automatically selects a PLMNid that corresponds to a registered PLMN (RPLMN) of the UE, a home PLMN (HPLMN) of the UE, a PLMN on a user-controlled list of PLMNs, or a PLMN on an operator-controlled list of PLMNs.

20. A method according to claim 17 further comprising the steps of:

receiving the registration request message at a radio access network (RAN);

extracting the selected PLMNid from the registration request message; and

determining if the registration request message includes the indicator.

21. The method according to claim 20 further comprising the steps of:

determining a substitute PLMN, if the indicator indicates that a substitute PLMN is allowed; and

forwarding the registration request message to the substitute PLMN.

22. The method according to claim 21 wherein the substitute PLMN shares radio access resources with a PLMN indicated by the selected PLMNid.

23. A method for selecting a core network for a communication device comprising the steps of:

receiving at least one core network identifier;

selecting a core network identifier to form a selected core network identifier;

setting an indicator to indicate whether a substitute core network is allowed;

forming a registration request message containing the selected core network identifier;

including the indicator in the registration request message; and

transmitting the registration request message.